

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A pulse wave propagation detection system comprising electrocardiographic signal detection means for detecting an electrocardiographic signal;[[,]] and eyeground image detection means for detecting an eyeground image in synchronization with-an each of at least two different points of the electrocardiographic signal detected through by the electrocardiographic signal detection means, ~~which system detects~~ and for detecting pulse wave propagation ~~through-in~~ an intracerebral blood vessel on the basis of a change in the a diameter of an eyeground vein, the diameter being measured ~~by use of an~~ at a target site of the eyeground image synchronized with ~~an arbitrary~~ each of the at least two different points of the detected electrocardiographic signal.

2. (currently amended): A pulse wave propagation detection system ~~comprising electrocardiographic signal detection means for detecting an electrocardiographic signal, and eyeground image detection means for detecting an eyeground image in synchronization with the electrocardiographic signal detected by the electrocardiographic signal detection means, and for detecting a state of sclerosis of a capillary artery by detecting pulse wave propagation through the capillary artery on the basis of a change in a diameter of an eyeground vein, the diameter being measured by use of the eyeground image synchronized with the detected~~

~~electrocardiographic signal.~~ according to claim 1, wherein a state of sclerosis of a capillary artery is detected on the basis of a pulse wave diagram prepared based on the change in the diameter of the eyeground vein.

3. (currently amended): A pulse wave propagation detection system according to claim 1, wherein ~~the change in the eyeground vein diameter is a change in the diameter of an eyeground vein at the~~ target site is an optic papilla.

4. (previously presented): A pulse wave propagation detection system according to claim 1, wherein the change in the eyeground vein diameter is the difference between the diameter of an eyeground vein as measured on the basis of an eyeground image synchronized with an R wave, which is an electrocardiographic signal, and the diameter of the eyeground vein as measured on the basis of an eyeground image synchronized with a T wave, which is an electrocardiographic signal.

5. (currently amended): A pulse wave propagation detection system according to claim 1, wherein the eyeground image detection means detection of ~~detects the eyeground image is performed by use of software which can provide an eyeground image synchronized with an~~ the detected electrocardiographic signal by extracting, on a computer display, a stationary eyeground image synchronized with ~~an arbitrary~~ the detected electrocardiographic signal from a motion eyeground image.

6. (currently amended): A pulse wave propagation detection system according to claim 5, wherein the ~~software which can provide an eyeground image synchronized with an electrocardiographic signal is software which enables extraction of a~~eyeground image detection means extracts the stationary eyeground image synchronized with an arbitrary the detected electrocardiographic signal while displaying a ~~the~~motion eyeground image and an electrocardiogram on ~~the computer display means of a computer terminal~~.

7. (currently amended): A pulse wave propagation detection system according to claim 5, wherein the ~~software includes a program for~~eyeground image detection means comprises executing means for calculating a ~~the~~change in the diameter of an ~~the~~eyeground vein on the basis of the eyeground image synchronized with an arbitrary electrocardiographic signal.

8. (currently amended): A pulse wave propagation detection system according to claim 7, wherein the ~~software includes a program for executing means for correlating~~correlates the change in the ~~eyeground vein diameter of the eyeground vein~~ with pulse wave propagation through an intracerebral blood vessel, thereby detecting the pulse wave propagation.

9. (currently amended): A pulse wave propagation detection system according to claim 7, wherein the ~~software includes a program for executing means for correlating~~correlates the change in the ~~eyeground vein diameter of the eyeground vein~~ with sclerosis of a capillary artery, thereby detecting ~~the~~a state of sclerosis of the capillary artery.

10. (currently amended): A computer readable storage medium storing a program ~~comprising an algorithm for executing software employed for implementing a~~ which executes, on a computer, the pulse wave propagation detection system as recited in claim 5.

11. (canceled).

12. (currently amended): A pulse wave propagation detection system according to claim 2, wherein the change in the ~~eyeground vein diameter~~ of the eyeground vein is a change in the diameter of ~~an~~ the eyeground vein at ~~the~~ an optic papilla.

13. (previously presented): A pulse wave propagation detection system according to claim 2, wherein the change in the eyeground vein diameter is the difference between the diameter of an eyeground vein as measured on the basis of an eyeground image synchronized with an R wave, which is an electrocardiographic signal, and the diameter of the eyeground vein as measured on the basis of an eyeground image synchronized with a T wave, which is an electrocardiographic signal.

14. (currently amended): A pulse wave propagation detection system according to claim 2, wherein the eyeground image detection means ~~detection of~~ detects the eyeground image is ~~performed by use of software which can provide an eyeground image synchronized with an~~ the detected electrocardiographic signal by extracting, on a computer display, a stationary eyeground image synchronized with ~~an arbitrary~~ the detected electrocardiographic signal from a motion eyeground image.

15. (currently amended): A pulse wave propagation detection system according to claim 14, wherein the ~~software which can provide an eyeground image synchronized with an electrocardiographic signal is software which enables extraction of a~~eyeground image detection means extracts the stationary eyeground image synchronized with an arbitrary the detected electrocardiographic signal while displaying a the motion eyeground image and an electrocardiogram on the computer display ~~means of a computer terminal~~.

16. (currently amended): A pulse wave propagation detection system according to claim 14, wherein the ~~software includes a program for~~eyeground image detection means comprises executing means for calculating a the change in the diameter of ~~an~~the eyeground vein on the basis of the eyeground image synchronized with an arbitrary electrocardiographic signal.

17. (currently amended): A pulse wave propagation detection system according to claim 16, wherein the ~~software includes a program for executing means for correlating~~correlates the change in the ~~eyeground vein diameter~~of the eyeground vein with pulse wave propagation through an intracerebral blood vessel, thereby detecting the pulse wave propagation.

18. (currently amended): A pulse wave propagation detection system according to claim 16, wherein the ~~software includes a program for executing means for correlating~~correlates the change in the ~~eyeground vein diameter~~of the eyeground vein with sclerosis of a the capillary artery, thereby detecting the state of sclerosis of the capillary artery.

19. (currently amended): A computer readable storage medium storing a program comprising an algorithm for executing software employed for implementing a which executes, on a computer, the pulse wave propagation detection system as recited in claim 14.

20. (canceled).

21. (new): A pulse wave propagation detection system according to claim 1, wherein the change in the diameter of the eyeground vein is a difference between diameters of the eyeground vein at target sites corresponding to the at least two different points of the detected electrocardiographic signal, and when the difference is substantially recognized, presence of the pulse wave propagation in the intracerebral blood vessel is determined.

22. (new): A pulse wave propagation detection system according to claim 1, wherein the change in the diameter of the eyeground vein is a difference between a first diameter of the eyeground vein at a first target site of the eyeground image in synchronized with an R wave of the electrocardiographic signal and a second diameter of the eyeground vein at a second target site of the eyeground image in synchronized with a T wave of the electrocardiographic signal, and when the difference is substantially recognized, presence of the pulse wave propagation in the intracerebral blood vessel is determined.